WHAT IS CLAIMED IS:

1. A circuit arrangement for deriving electrical power from a high frequency electromagnetic field, comprising:

an antenna that is adapted to receive the electromagnetic field and that has two antenna connection terminals; and

a detuning unit that is connected between said two antenna connection terminals and that is adapted to limit an electrical power absorbed by said antenna from the electromagnetic field;

wherein said detuning unit comprises at least one circuit component having a variable impedance characteristic of an impedance that is adapted to vary dependent on and responsive to a field strength of the electromagnetic field prevailing at said antenna.

2. The circuit arrangement according to claim 1, adapted and designed to operate with the electromagnetic field having a frequency in a range from 300 MHz to 3000 MHz.

3. The circuit arrangement according to claim 1, adapted and designed to operate with the electromagnetic field having a frequency in a range from 400 MHz to 2450 MHz.

4. The circuit arrangement according to claim 1, wherein said variable impedance characteristic of said circuit component

comprises predominantly a variation of an imaginary part of said impedance.

5. The circuit arrangement according to claim 1, wherein said circuit component comprises a varactor diode or varactor.

6. The circuit arrangement according to claim 5, wherein said detuning unit further comprises a varactor control device connected to, and adapted to control, said varactor diode or said varactor dependent on and responsive to the field strength.

7. The circuit arrangement according to claim 1, wherein said at least one circuit component of said detuning unit comprises two varactor diodes that are connected anti-parallel to each other between said two antenna connection terminals.

8. The circuit arrangement according to claim 7, wherein said two varactor diodes each respectively have a voltage-dependent capacitance that varies dependent on a voltage prevailing at said two antenna connection terminals, which relates to the field strength of the electromagnetic field prevailing at said antenna, and wherein said voltage-dependent capacitance varies in a range of said voltage arising in normal interference-free operation of said circuit arrangement with said antenna receiving the electromagnetic field.

9. The circuit arrangement according to claim 1, wherein said at least one circuit component comprises, in order, a first capacitor, a varactor, and a second capacitor connected in series between said two antenna connection terminals, and said detuning unit further comprises a varactor control device connected to said varactor and adapted to apply a field strength dependent control voltage to said varactor.

10. The circuit arrangement according to claim 9, wherein said varactor control device comprises a controllable voltage source.

11. The circuit arrangement according to claim 10, further comprising a field strength detector that is adapted to detect the field strength of the electromagnetic field and that has a field strength signal output connected to a control input of said varactor control device.

12. The circuit arrangement according to claim 1, further comprising a rectifier with an input side connected to said two antenna connection terminals and with a rectifier output side, and a voltage limiter circuit connected to said rectifier output side.

13. The circuit arrangement according to claim 1, integrated in a passive transponder.

14. The circuit arrangement according to claim 13, wherein said transponder further comprises a modulator that is connected to said two antenna connection terminals and that is adapted to modulate and backscatter from said antenna electromagnetic waves of said electromagnetic field received by said antenna, wherein the modulator is adapted to perform a modulation that is dependent on data that are to be transmitted.

15. The circuit arrangement according to claim 14, wherein said modulator is a phase shift keying modulator adapted to carry out the modulation as phase shift keying modulation.

16. The circuit arrangement according to claim 1, wherein said detuning unit does not include an amplitude shift keying modulator.

17. A receiving/backscattering device adapted to receive, modulate and backscatter an electromagnetic field, comprising:

an antenna that is arranged to receive the electromagnetic field and that has two antenna connection terminals;

a modulator connected directly or indirectly to said two antenna connection terminals and adapted to vary a reflection characteristic of said antenna so as to form a modulated backscattered signal from the electromagnetic field received by said antenna;

a rectifier having an input side connected to said two antenna connection terminals and an output side adapted to provide rectified power for operating said device; and

a variable-impedance arrangement that is connected directly or indirectly between said two antenna connection terminals, and that exhibits a variable impedance adapted to vary dependent on a field strength of the electromagnetic field thereby varying a degree of power coupling from the electromagnetic field through said antenna to said input side of said rectifier dependent on the field strength of the electromagnetic field.

18. The receiving/backscattering device according to claim 17, wherein said variable impedance arrangement comprises two varactor diodes connected parallel to each other in respective opposite forward conduction directions directly between said two antenna connection terminals.

19. The receiving/backscattering device according to claim 18, wherein said two varactor diodes each respectively have a voltage-dependent capacitance that varies dependent on a voltage prevailing at said two antenna connection terminals, which relates to the field strength of the electromagnetic field prevailing at said antenna, and wherein said voltage-dependent capacitance varies in a range of said voltage arising in normal interference-free operation of said device with said antenna receiving the electromagnetic field.

20. The receiving/backscattering device according to claim 17, further comprising a series circuit including a first capacitor and a second capacitor connected in series between said two antenna connection terminals,

wherein said variable impedance arrangement comprises a varactor connected in series between said first and second capacitors and thereby connected indirectly between said two antenna connection terminals, a controllable voltage source having a control input and having a controlled variable voltage output connected to opposite sides of said varactor between said first and second capacitors, and a field strength detector that is arranged and adapted to detect the field strength of the electromagnetic field and that has a field strength dependent signal output connected to said control input of said controllable voltage source.

21. The receiving/backscattering device according to claim 20, wherein said modulator is also connected via said controllable voltage source to said opposite sides of said varactor and is thereby connected indirectly to said two antenna connection terminals.

22. A method of deriving electrical power from an electromagnetic field for operating a receiving/backscattering device including an antenna, comprising:

a) receiving said electromagnetic field with said antenna, and coupling electrical power from said electromagnetic field via said antenna into said device;

b) rectifying said electrical power to provide rectified electrical power for consumption in said device; and

c) varying an input impedance of said device by varying predominantly an imaginary part of said input impedance so as to vary an amount of said electrical power being coupled into said device dependent on and responsive to a field strength of said electromagnetic field.

23. The method according to claim 22, wherein said varying of said input impedance does not involve amplitude modulation.

24. The method according to claim 22, wherein said varying of said input impedance comprises varying the capacitance of at least one varactor diode having a voltage-dependent variable capacitance connected between two terminals of said antenna, wherein a voltage prevailing on said two terminals is dependent on the field strength of the electromagnetic field.

25. The method according to claim 22, wherein said varying of said input impedance comprises detecting the field strength of the electromagnetic field, and applying to a varactor connected between two terminals of said antenna a variable

voltage that is actively varied and controlled dependent on the field strength that has been detected.

26. The method according to claim 22, wherein said varying of said input impedance involves providing an increased degree of impedance matching of said input impedance when said field strength is relatively lower and providing a decreased degree of impedance matching of said input impedance when said field strength is relatively higher.